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MARCH 15, 1926

Issued Weekly

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The Seaplane Patrol

Photo International News Service

VOLUME
XX

SPECIAL FEATURES

NUMBER
11

AMERICAN AIRCRAFT ENGINE DEVELOPMENT
CUTTING FUEL COST IN AIR TRANSPORT
TRAVEL AIR HANGAR

GARDNER PUBLISHING CO., INC.
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225 FOURTH AVENUE, NEW YORK

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AVIATION

VOL. XX, NO. 11

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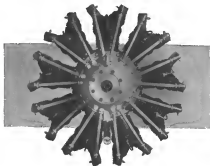
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VOL. XX

MARCH 15, 1926

No. 11

Money But No Reorganization

FROM THE developments in Washington it appears to be almost certain that the only immediate result of all the wrangling and hawking that have repeated on governmental air activities will be to give the aviation more money to spend and perhaps a slight increase in personnel.

As this column has been predicted freely in well informed circles in Washington, AVIATION has not felt it worth while to give much attention to the score or more bills that have been introduced and allowed to die in committee.

It is an unfortunate commentary on the inertia of official Washington to have to admit that the hierarchy of the Army and Navy can easily overlook the recommendations of the President's Aircraft Board, Congressional Committees and an overwhelming public opinion in favor of a change in the existing conditions. But, with true sagacity, the whole situation is explained to get additional funds.

No one will begrudge the services of a penny of these increases. They may, however, have not all effect. The public may come to believe that the increases in equipment are more than a material gain. In that event all the work that has been done by those interested in larger and more independent air services will have been in vain.

The Need of Impartial Flight Testing

THE STEADY growth of interest in commercial aviation, as evidenced throughout the United States at the present time, with its attendant competitive selling of many types of commercial aircraft, brings to the foreground once more the old problem of uniformity of flight tests and published performance data. It is, unfortunately true, that a great deal of performance information, as published at present, is inaccurate and non-uniform, and this condition often leads into difficulties.

A most unfortunate part of it all is that this inaccuracy and non-uniformity of information is not intentional, but rather is due to the variable results of the haphazard methods of flight testing employed in all good faith, by every manufacturer at the present time. The very nature of performance tests and the many factors entering into such tests, tend to produce a confusion of conditions extraordinary ones and standardized methods are used. The subject of performance tests should be considered from both the mechanical and human standpoint.

On the mechanical side of the problem, there is the employment of poorly selected and accurately adjusted in-

struments, the use of speed screens which have been carefully measured and are of sufficient length to indicate true speeds, and the proper consideration of atmospheric conditions.

On the human side, there is, first, the pilot. Flight testing is exacting in its requirements and should be done by a pilot skilled in the work—one who knows the kind of errors that are apt to creep into the data through careless flying. If the pilot is not experienced, it is absolutely necessary that he be given accurate and comprehensive instructions by someone familiar with the work. Trained observers are also needed—men who are familiar with the tests and instruments, and the interpretation of results, test who will be quick to detect any unusual conditions which might operate either to the advantage or disadvantage of the machine being tried.

From a consideration of the above, it appears that it would be of great advantage to have flight tests standardized and conducted by some organization whose competency is generally accepted and recognized. The question then becomes: "What is there such an organization?"

The information necessary for conducting flight tests could be obtained from the Army and Navy air services who have devoted a great deal of time to study along these lines. Aircraft manufacturers then could compare and devise a standard type of test for commercial airplanes, acceptable to all.

There would be nothing arbitrary or compulsory in the operation of the plan. A manufacturer who developed a new type of commercial airplane, for instance, would first make his own tests and experiments, and whenever these would be so satisfied that the airplane was in its final form and ready to offer to the public.

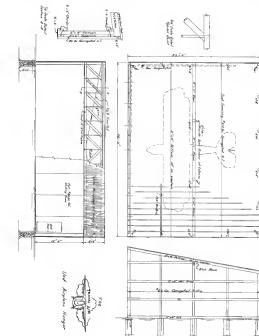
The benefits of such a plan were obvious. The public would now place full confidence in these published performance figures, which would then become valuable sales arguments. The manufacturer, who had concentrated his efforts on performance, would reap his reward, and not suffer the disappointment of seeing an inferior machine surpass his in "paper" performance through inaccurate flight testing. And the manufacturer who had not concentrated on performance would realize that either he or the public was under any illusions on that score, and he would be free to direct his sales efforts along some other line, such as cost, maintenance, etc.

Perhaps the greatest benefit of all would be that which would accrue to all concerned in aviation, in that there would be built up gradually a general understanding of the capabilities of airplanes, a realization of what is good and perhaps more important, what not to expect from them. Commercial aviation would then be free from one of its worst pitfalls—that of having steady, regular progress made to appear small and petty in the light of wild and exaggerated dreams.

An Inexpensive Serviceable Hangar

THE BUILDING of a large hangar is a problem and study in itself, and has already become an industry in the hands of specialized and skillful builders and engineers, yet, to all operators who cannot afford a first class building, or to the man who wants space for only one or two airplanes, the question of a comparatively inexpensive and yet serviceable hangar is a very important one.

Requiring this and driving cheap and practical hangar space for itself and most of its kind customers, the engineering staff of the Travel Air Mfg. Co. set out to evolve a small cheap hangar. Such a hangar, it was realized, must be easy to construct, easy to maintain, durable, strong, well lighted, etc. The solution lay upon, as shown in the accompanying drawing, is a simple building of corrugated



galvanized iron, rough dressed lumber and garage hardware. It has been built in Kansas for less than \$600.00 and only costs in New England do not run over that figure. The cost of such elemental material, and the labor and cost required do not vary much in any part of the country. This does not include any floor, nor any lining, inside the steel itself, which would be necessary if the hangar were to be heated for cold weather flying. A rough dressed concrete floor could be constructed at a cost of about 25 cents per sq. ft. And there are several satisfactory materials for roofing upon the metal, such as Colton.

The construction is very elementary as can be seen. The end posts of the doors hang back along the side walls and the rest of the posts are hung on a track of the type built and put on the market by a number of manufacturers of garage hardware.

There is almost one third of the hangar left available for work benches, storage and equipment. Windows can be placed in the rear and side as such needs requirements dictate. That is, a hangar in which much work to be done would require more light than one which would be used for storage purposes only. The ones built in Kansas have two or three

windows each. The posts are shown in the drawing, set in concrete, but would be just as good set upon a block of concrete with roller or roller wheels. If no floor is put in, the ground under the doors should be made absolutely level and the doors set slightly in to prevent them from being blown up from the floor. Just a concrete mat of simple design will be suggested.

In use, these hangars have proved very practical. One owner makes a practice of driving to the field in his car, shutting out the day, taking it to his car and flying out some days throughout the fall of Kansas and Oklahoma. The buildings have withstood a very bad Kansas "winter" of heavy snow weather-light and cold. A small wind storm or all of winter has been found sufficient to make work to be done during quite cold weather, and the general type of building has proved satisfactory, being designed in accordance with the recent Federal building code, in regard to structural strength.

The accompanying drawing is quite self-explanatory and should furnish all the information required for the construction of a hangar of this type.

Airplane Engine Wrecked 12,000 Ft. in Air

Two engines, broken one engine separated, recently had a remarkable escape when their engine rose high to permit 12,000 ft. in the air. A new type of propeller, which was being tried out, suddenly burst. One piece of the propeller blade flew clear, while the others, still attached to the engine, whirled around with terrific force, breaking the windshield just

New Ford Airplane Plant

A new airplane manufacturing plant and a new hangar having a capacity of housing fifteen or more airplanes, having one of the largest and most modern aircraft developments in the country, will be erected within the next few months at the Ford Airport at Dearborn, Michigan. The new hangar is planned for this plant, which is to replace the building of the most advanced engine division of the Ford Motor Co., recently destroyed by fire. The new airplane plant, which is to occupy part of the site of the former building, will be three times as large and will have a floor area of 90,000 sq. ft. It will be fitted with every modern facility for the manufacture of airplanes but not in the standard Ford system of progressive production. Materials will enter one end of the building and proceed through the various stages of manufacture, emerging from the other end as completed airplanes.

Until the new structure is ready for occupancy the Ford division of the company will continue to be housed in one of the new buildings in the Dearborn laboratory grounds where assembly already has been installed and work of building advanced airplanes has started. Plans for the new plant call for a building 120 ft. wide by 100 ft. long and one story in height, of the most general construction in all the new manufacturing and assembly plants of the company. An unusual feature of the building will be that it will have a steel 120 ft. span frame and will be the only building without roof supports, giving clear space for assembly of the airplanes. The roof will be of steel and glass and the exterior walls of brick, reinforced in general design with the other buildings in the group at Dearborn. A landing plant will be erected in connection with the building.

The new hangar building, to be located adjacent to the manufacturing plant and on which work is already under way, will also be of large but of different construction in order to accommodate the landing and easy landing of airplanes. It will be 125 ft. wide by 380 ft. long. An unusual feature is that most of the 380 ft. sides will be enclosed by steel and glass doors of special construction. This will permit the entire opening of either or both sides, the doors sliding back and holding over ends of the building. This has been accomplished by effecting a small construction of condenser type, reaching in other side from steel towers back down the center of the building, the roof being supported much the same as the cloth on the steel strips of an umbrella.

An addition also is planned for the present airport hangar which will house a dynamometer room for testing airplane engines as well as an oil test room. With the completion of the new hangar building, the present hangar, with its additions, will become a maintenance and repair station for airplanes operating in the Ford Air Transport.



The engine after the accident

back of the front two cylinders. The propeller and hub, pistons were here loose and fell clear of the airplane. Flying fragments from the engine ripped open the front of the fuselage, and tore the wing covering in many places. The engine was in the air for a short time, and then fell in a safe landing, while the front part of the engine fell in a 120 ft. wind over the river. (APC)

Pacific Coast Airways Marked

Names of Towns Painted in Large White Letters as Indicators to Assist Cross Country Flyers.

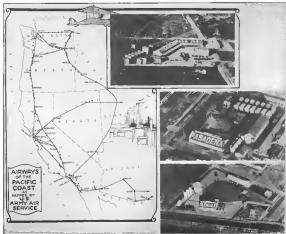
RAPID PROGRESS is being made in carrying out the Standard Oil Company's plan to mark the airways of the Pacific Coast. Some weeks ago the Army Air Service asked the company's co-operation in this matter, and the company immediately responded.

The Army Air Service has assigned out certain airways on the Pacific Coast. Along these lines the Standard Oil Company has numerous distributing plants—not service stations, but built along stations—each with a warehouse or garage with a roof suitable for carrying the name of a town in large white letters on a dark background.

It was decided that the first airways to be marked should be those running North and South from Seattle to San Diego. More than a hundred towns were selected for the signs and the work of painting is now going on. These black letters

are a minimum of 12 ft. in height, and, in many cases, much larger. In good weather the signs are all readable from 5000 ft. up, and some of them from much greater heights. Shortly, the work will be finished, and then the marking of airways eastward from Seattle, Portland, San Francisco, Los Angeles and San Diego, will be begun. All the airways will be flown over and, wherever the fliers find need for additional signs, these will be put in place. As weather develops there will be still more air signs, until it is likely that, in the future, all of the Standard Oil Company's 650 stations will be marked.

Another thing the company is doing is to set up aerial navigation signs to place, at each station, a white arrow indicating the North when compasses are available, this indication of direction will be of much benefit under certain circumstances.



How the Pacific Coast airways are being marked.

In the aerial view at the top is visible, in addition to the marker, one of the white arrows indicating true North.

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OKLAHOMA The Atlantic Sales Company of Oklahoma P. O. Box 1101, Tulsa, Okla.	WISCONSIN The Ray Barker Aircraft Co. Milwaukee, Wisconsin.

ADVANCE AIRCRAFT CO.
Troy, Ohio

Foreign Markets for American Aircraft

Statistics During Past Year Show Progress. Tremendous Field for Foreign Trade Still Apparent.

THE EXPORTATION of American aircraft products, as shown in the following statistical study, although comprising only a small percentage of automotive exports, should be of great interest to persons fostering increased industrial development in the United States. As an example of the aircraft already demonstrated, the aircraft industry, through the Argentinean Chamber of Commerce of America, recently supplied the Argentine Division with copies of the "American Yearbook" for the foreign offices of the Bureau of Foreign and Domestic Commerce of the Department of Commerce. These yearbooks, as well as other information on American aircraft products, are now available for the general of the Far East, Central, Latin America, Africa and Europe. An increasing number of aircraft and aircraft equipment sales are expected to result.

1935 Shows Increase

There were 39 aircraft, airplanes and other aircraft exported from the United States during 1935, representing an increase of 30 per cent over the 30 exported during the preceding year. A slight decrease—attributable to the failure of 10 aircraft parts and engine components—occurred in the value of all aircraft products exported during the past year, when their value was \$793,658, or \$51,614 less than the value of combined aircraft products exported during 1934.

Steady Improvement

A significant feature of last year's aircraft exports is that the past year record attained in 1936—when 68 airplanes were exported—was surpassed. The fact that there has been a steady increase since 1932, substantiating in the record attained during 1935, should give rise to a warranted optimism on the part of aircraft producers in the United States, who are competing in foreign markets with heavily subsidized European producers. The following tables show the past year trend of all aircraft product exports, with the exports during 1935.

Exports of aircraft products from the United States, 1934, 1935 and 1936

Aircraft and airplane parts and accessories	1934		1935		1936	
	Number	Value	Number	Value	Number	Value
Aircraft	39	\$793,658	41	\$742,110	68	\$934,444
Parts and accessories	10	\$51,614	10	\$51,614	10	\$51,614
Total	49	\$845,272	51	\$793,724	78	\$986,058

*No aircraft other than airplanes and airplanes were exported prior to 1935.

†This category from other manufacturers' exports prior to 1934.

During 1935 the percentage of airplanes, airplanes and other aircraft sent to Latin America comprised 65 per cent of those exported to all countries, as compared with 60 per cent of the total exported there during 1934.

A Photography Record

Establishing what is believed to be a world record for commercial one-stop aerial mapping, Robert A. Smith, Fairchild Photographer, flying with Pilot Frank Hawley of the Commercial Aircraft of America at Chicago, Illinois, maintained a flight for a period of 6 hr. 50 min. in the course of photographing a large area which the company has under contract at Venezuela.

Another item of interest is the fact that Smith took into Mexico the first Curtiss Red metal propeller, which he has

been using on this work, and which, he believes, has been the most of around 500 people working their knowledge on it as an oil field material at a rate.

The Company's Mexican de Artesian is a very progressive little operation located away with a fleet of House-Bowditch, which they operate out of different companies in the field.

Mr. Smith, their manager, explains that the reason the money is covered by air is an account of the extreme difficulty some falls on the ground used to show to the people on when the payroll was transported by road, hence the adoption of the aerial method.

Detailed Statistics

The following tables show aircraft product exports by country of destination, during 1935:

Country of destination		Number		Value	
Aircraft		Number		Value	
Argentina	1	1	\$17,100	1	\$17,100
Canada	1	1	\$1,000	1	\$1,000
France	1	1	\$1,000	1	\$1,000
Germany	1	1	\$1,000	1	\$1,000
Italy	1	1	\$1,000	1	\$1,000
Japan	1	1	\$1,000	1	\$1,000
Latin America	1	1	\$1,000	1	\$1,000
Europe	1	1	\$1,000	1	\$1,000
Asia	1	1	\$1,000	1	\$1,000
Africa	1	1	\$1,000	1	\$1,000
Australia	1	1	\$1,000	1	\$1,000
Total	10	10	\$33,100	10	\$33,100

Country of destination		Number		Value	
Aircraft Parts and accessories		Number		Value	
Argentina	1	1	\$1,000	1	\$1,000
Canada	1	1	\$1,000	1	\$1,000
France	1	1	\$1,000	1	\$1,000
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Italy	1	1	\$1,000	1	\$1,000
Japan	1	1	\$1,000	1	\$1,000
Latin America	1	1	\$1,000	1	\$1,000
Europe	1	1	\$1,000	1	\$1,000
Asia	1	1	\$1,000	1	\$1,000
Africa	1	1	\$1,000	1	\$1,000
Australia	1	1	\$1,000	1	\$1,000
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Europe	1	1	\$1,000	1	\$1,000
Asia	1	1	\$1,000	1	\$1,000
Africa	1	1	\$1,000	1	\$1,000
Australia	1	1	\$1,000	1	\$1,000
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Source: Bureau of Foreign and Domestic Commerce.

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THE AIRPLANE BUILDERS—AND GOODYEAR



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GOODYEAR

AVIATION EQUIPMENT

From Flying to Adventure, Plans Mention AVIATION

AIRPORTS AND AIRWAYS

Detroit, Mich.

By Lyle S. Gilson

February's move and cold winds apparently seem to act as a stimulant to winter flying in these parts. Almost 2,000 airplanes landed Detroiters were at Port Huron Field last Monday to witness the first official flight of the new Winson-Detroit plane. Earlier in the week, over 3,000 people attended the inauguration of the Detroit-Cleveland, Detroit-Chicago without an aircraft arriving at the Ford Airport.

Had it not been for the cold, damp weather and the ever present snow, one would have imagined a record number of aircraft were being shipped. While a 50-passenger plane of the U. S. B. Letter Courier (Burlington) plane number, Henry Ford road, Edsel Ford landed the Cleveland road plane with six miles of letters. In addition to three other Ford road planes, an F.W.8 and F.W.11, Curtiss passenger plane and a Douglas Transport from St. Louis were landed up. Among the airplanes planned to the west of these machines were Alfred Varvill's new flying wing OX5 job, a Winson, Travel Air and several Jennies. After the mail plane had got away followed by the Curtiss plane and Douglas, Overlander took off in a strong head wind in his trusty Jenny. About 100 ft. up, the OX5 died and Overlander managed to make a landing, though heavy, landing down wind in a small channel close to the field. It was fortunate for aircraft in these parts that the meet was not marred with what might possibly have been a bad crash.

A considerable portion of the structural work is completed on the new Ford-Stout airplane factory. The new building

which replaces the one completely destroyed by the six week snow, is three times larger than the former plant and it is expected it will be completed only in the spring.

To show the versatility of the third Detroit-designed-and-fabricated plane to be built in quantities, Eddie Winson staged a special demonstration. Eddie, and two of his four passengers on the first flight, entered the enclosed airplane-shaped cabin without help and with their short descent aided. First, the electric starter, the Wright 300 hp. Whirlwind was run at full throttle without "choke", the landing wheel locked, which was a special feature of the new steel dashboards from Indiana, holding the plane stationary.

Following the first flight, one of the wheel locks, the machine turned around in its own track, and took off in a remarkably short run. Landings were made with the brakes "hot" and the heavily loaded plane came to rest in considerably less than 100 ft. At no time was there any tendency on the part of the plane to nose over when the brakes were on. Numerous flights were made during the afternoon and several prominent business and civic people were carried. Among these were William B. Marks, chief engineer of the Ford Motor Co. and his daughter.

While a part of those of the Detroit Flying Club, Eddie Winson spoke of Detroit being the center of the aviation industry right on it as the leader in the automobile field. "To do this," he continued, "business must be conducted along approved modern lines and all financial debts must be cleared up." "No stock or security development companies will be sold to investors and replace, so that the past good

sound of the aviation manufacturing industry on this section of the country, will be maintained," Winson concluded.

As an example of the tremendous growth of the airplane building industry, Winson stated that, during a recent visit to the plant of the Advance Aircraft Co., Troy, Ohio, manufacturers of the Waco plane, he found 40 skilled workers turning out the complete planes every week. The workmanship and precision reflecting into the construction of the Waco planes was held to an extremely high and rapid standard.

When Gus William Marshall arrived in Detroit on Feb. 12, as part of the nation wide lecture tour, he was to be met at the Michigan Central Depot by a large force of well known fliers and conducted to his hotel by a fleet of several hundred automobiles. Entertainment during the day, including visits to the large automobile plants had been planned and the several local flying fields were to be handled by the Detroit Flying Club. At most of the fields, the latest Detroit built commercial planes were on display and the General was to be invited to fly any of them desired. Almost one half of the main floor of Grindheim Hall where Marshall was to speak was taken over by the Detroit Flying Club, who have arranged for the summer dashboards and the other landing. All transportation, refreshments, decorations and costs were handled by special committee of men appointed by the Flying Club.

New England News

By Fred Adams

From Bangor, Me., comes the announcement of the formation of a Bangor Chapter of the N.A.A. on Feb. 11. The officers of the new chapter are:

President, Edward S. Bailey
Vice-President, David D. Smith
Secretary, Maynard A. Smith
Treasurer, Maynard A. Smith

In addition, there will be six directors, including the five officers already named, and it is expected that this chapter

will be of great value in developing aviation in Bangor and vicinity.

There was very little flying at the Boston Airport during the week of Feb. 15-21, an account of the snow and slush which covered the field. The only flying time was 145 minutes when was made up of 14 separate flights and the plane used was the Airport Air plane.

Daniel Bryan, president of the Boston Airport Corporation, returned from his trip, which included some time spent at the Travel Air factory in Wichita, Kan., and as inspection of the flying fields in Florida and the South. Bryan reported that 10 Travel Air planes have been sold within the last few weeks.

Capt. Robert Raymond spoke before the Army and Navy Club at Boston at their Club room in the Hotel McAllister, on Wednesday night, Feb. 14, talking of his experiences during the war. Captain Raymond received the DSC and Cross of St. Louis, with pilot's wings with the 25th Squadron, commanded by General Hartley.

Cy Oldfield, late of Cleveland, but now of Boston, is in Washington at the present time, where it is reported that he is very busy engaged in advising Cypharistas to the Army and Navy on aircraft and it is also reported that the National Geographic Society is considering making special arrangements with Cy to prepare a series of articles for them on his Travel Air adventures.

Massachusetts News

By Ralph B. Elder

Two new West planes have been delivered to the Mid-West Airways Corp. during the past two months by the Advance Aircraft Co. of Troy, Ohio. All of the machines have been flown from the factory by John Livingston, manager of the local company, and three of them have been delivered to passengers.

The Campbell Airplane Co. of Natick, Ill., ordered three Waco, two of which have been delivered. Another Waco



Left Transport plane is delivered from West Coast. Right, after delivery and a test.

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It Will Pay You Well To See This Plane Before You Invest In Other Equipment.

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was sold and delivered in February to McGeorge's flying field at Chatham, Ill. Several other orders for flying delivery have been received.

Ray Pitzer, of Muskegon, Ill., a former Army pilot, has purchased a New Seaway from the Mid-West and took delivery on March 1. Mr. Pitzer formerly operated a Curtiss J-3 at Muskegon. He has ordered a permanent hangar on his flying field for the machine.

R. M. Hinkle, of Walkerton, N. C., who has been taking a course in flying at New South, has purchased a Lind Berline airplane from the Mid-West company, which he will fly back to the East coast this Spring, where he plans to establish a flying field in the Winston-Salem, N.C., territory. Mr. Hinkle expects of a passenger carrying business in his own town and near West to take his flying training and to secure an airplane.

Two other orders have also been disposed of to operators of commercial fields in western Illinois during the past few weeks. Sales taking over the Illinois agency for the Waco, John Livingston has demonstrated the plane to pilots at Chicago, Peoria, Moline, Galesburg and other centers.

Wins Air Race to Child

Mrs. B. M. Hubert arrived at the bedside of her preschool daughter in Decatur, Ill., on Feb. 25, after a twenty-four hour trip from San Antonio, Tex., by airplane and train.

She boarded an airplane at North Worth airport on Feb. 25 and her North west daughter faced a landing at Decatur, Mo. She traveled the remainder of the way by rail.

In discussing the flight, Mrs. Hubert declared that there had been no cause for worry. After riding through the rain for three hours "we just picked a nice field and came down," she said.

Clover Field Flies

The "Clover Field Flies" of Hollywood, Cal., are preparing bookings for their 1936 season. This group of stunt men is one of the best known in the western world. They engage in wing walking, formation flying, plane to plane transfers, acrobatic loops, spins, parabolas, jumps, etc. Through letters, publicity and advance reports the flying circus has built up a good show business.

Registration was obtained from the state for the circus, clubs, groups of associates or other persons. Arrangements are made after work at the time of the show, usually on city days and the show put on by the circus has proved to be a great attraction. Besides their circus work, the "Clover Field Flies" do photographic work and practice aerobics.

Germans Plan Giant Boat

As a result of Raymond Foran's successful flight across the Atlantic in a Dornier Wal the Dornier company is planning to build a giant flying boat for trans-Atlantic passenger and freight service. It is reported that the new plane will have engines totaling 5,000 hp.

One of the special features in the business plan for the plane, which, it is believed, will be capable of keeping them aloft for many hours with a full load of passengers and will enable them to withstand heavy seas.

The winged vessel will be 300 ft. and the motor will be built in the wings. For the passenger planes every luxury is planned.

The plane will be constructed on the Dornier shores at Friedrichshafen, so that their construction can be thoroughly supervised on Lake Constance, provided the International Military Control Committee grants permission, otherwise the Post plant at the company will be used.

Saved in Parachute Leap

Leut. Frank O'Donoghue, specialist officer at Selfridge Field, made a forced parachute jump from his plane 500 ft. to the ice of Lake St. Clair when the plane caught fire. Eight hours and hours were the extent of his injuries. He landed heavily, bruised, for the fire.

Leut. O'Donoghue, who brought down seven German planes during the World War, suffered a broken back in a plane

crash near Buffalo, N. Y., 24 months ago and was in a hospital several weeks.

Soon after receiving flying after the Buffalo accident, Hoyer was ordered to jump 2,000 ft. from a plane over Mead Field, Dayton, Ohio, when the airplane flame of his plane collapsed.

United States Air Forces

Douglas O-2 Planes For Chemical Field

Douglas O-2 airplanes being completed by the Douglas Aircraft factory at Santa Monica, Calif., for the Army Air Service, are now being completed and it has been ordered for pilots, at stations to which these ships have been assigned, to be detailed to ferry them to their home stations. A flight consisting of May W. C. McGraw, Capt. Chas. R. Rabe, Leut. J. V. Hart and Leut. H. G. Peterson, directed recently for Santa Monica by rail to arrive the ships assigned to Chemical Field.

The new ones delayed at the Douglas factory for a few days, and Major McGraw and Captain Rabe took advantage of the delay by flying the O-2s around the factory airbase. Staff Sgt. J. Smith, Sgt. C. E. Bailey, Pvt. H. B. Castro, Army Marshal and Joseph H. Brewster of Coeur d'Alene, Idaho, were assigned transportation to Chemical Field to take different courses in the Air Service Technical School, and they were assigned as passengers on the Douglas O-2s, then using the most of transportation by rail. After a few days' stay at Santa Monica the flight took off for San Diego outside to the home station, accompanied by Capt. O. H. Quinn, also ferrying an O-2 to his home station, Rolling Field. The flight was successful, delays being caused only by technical matters.

From San Diego the flight made stops at Tucson, Ariz.; El Paso, Texas; New Orleans, Texas; Muskogee, Okla., and made the last stop from Muskogee, Okla., to Chemical Field, arriving 32 days after departure from Santa Monica. The O-2 stopped in the Air Service Technical School has been doing its allotted flying, and it was noted that all the pilots are satisfied with its performance. The O-2 stands and serves fast for a flight of eight hours.

Maready's Altitude Put at 30,700 Ft.

The official height reached by Leut. John A. Maready of a Lockheed plane in his last for the world's record on Feb. 29, Peacock Pass. This was determined in a report received by Lockheed Field officers from the Bureau of Standards at Washington, where the record was observed.

When Lieutenant Maready alighted after the flight, measurements in his plane showed that he had attained a mark of 30,700 ft.

With numerous chances expected to increase the height of the plane, the plane reached, Lieutenant Maready is planning to make another attempt at the world's record within the next few days.

Regains Control After 3,000 Ft. Drop

Leut. David R. McCaskey of the Maryland National Guard flying corps, believing that his engine on his airplane could not be stopped while he was in the zone of the crash, decided to the front cockpit while his plane was 6,000 ft. above Chemical Field. By the time he reached the front seat, however, the plane suddenly fell uncontrolled, fell nose-down 2,800 ft.

When within 200 ft. of the water, Lieutenant McCaskey managed to turn the plane pointed with the surface. He then glided the machine to Laguna Field and landed with the re-

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This latest Eastman Aero Camera does all things either military or commercial work requires both snapping and "slide"ing.

It is hand-operated. One crank winds the film and resets the shutter, an unique advantage. A Venturi vacuum valve holds the film flat in the first plane.



Shutter speeds are 1/16 to 1/250 second. Exposure, 17 x 14 cm. (7 x 5 1/2 in.). Made of aluminum, light and rigid.



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has met with such an enthusiastic reception that we are now starting construction on the first unit of an additional airplane factory that is to contain four acres of floor space.



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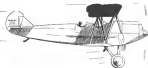
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gins working perfectly. He explained to spectators at the field that, on a first attempt to land, he could not stop the engine and was forced to climb to the elevation from which the plane was fired.

Bomb Dropping Under Adverse Weather Conditions

First Lieut. J. D. Barlow, pilot, Tech. Sgt. Niro, Bombardier, and Sgt. Wilcox, Radio Operator, successfully accomplished on January 23, a bombing mission under very adverse conditions at Phillips Field, Aberdeen Proving Grounds, Md. A 2400 lb bomb was dropped from an altitude of 4500 ft, despite the fact that a 50-mile wind was blowing and the temperature was approximately zero at that altitude. The Post Commander is a letter stating:

"I have verbally expressed my congratulations to some of the personnel and am pleased to make the incident a matter of record, with the request that you notify all concerned of my admiration and appreciation for their most excellent feat of accomplishment under very trying conditions."

NAVY OFFICERS

Ensign Joseph I. Taylor det. Res. Ship, New York, to temp. duty Nav. A. Sta., Pensacola.

Ensign John E. Ottobauer det. Navy Yard, Washington, to Aircraft Station, Battle Fleet.

Ensign Eugene L. Monaghan det. Nav. A. Sta., Pensacola, to U.S.S. Eagle 68.

Ensign Harold B. Belding det. Corps of Nav. Aircraft, East Coast Det., to Corps of Nav. Aircraft, Commanded Aircraft, Battle Fleet.

Ensign George F. Chaplin det. Aircraft Station, Battle Fleet, to U.S.S. Maryland.

Ensign Robert C. Wernick det. VT Sqn. 1, Aircraft Station, Battle Fleet, to VO Sqn. 1, Aircraft Station, U.S.S. Tennessee.

Ensign (jg) Frank Akers det. VT Sqn. 2, Aircraft Station, Battle Fleet, to U.S.S. Nevada.

Lieut. (jg) Max I. Black det. U.S.S. Williamson to temp. duty Nav. A. Sta., Pensacola.

Ensign Lester E. Rice det. Res. Ship, New York, to temp. duty Nav. A. Sta., Pensacola.

Ch. Gun. Raymond Cole det. Nav. A. Sta., Lakeside, to Annapolis Station.

Ensign Halcyon C. Vinet det. U.S.S. Nevada, to Nav. A. Sta., Pensacola.

Lieut. (jg) Daniel W. Herrigan det. Nav. A. Sta., Pensacola, to U.S.S. Niagara.

Lieut. (jg) William B. Jackson det. U.S.S. Raleigh, to temp. duty Nav. A. Sta., Pensacola.

Lieut. George B. Kelly det. Nav. A. Sta., Core City, Canal Zone, to Res. Ship, San Francisco.

Ensign Crawford Adams det. U.S.S. Anzio, to temp. duty Nav. A. Sta., Pensacola.

Lieut. Louis F. Mayson detached to duty involving flying Nav. Aircraft Station, New York, Field.

Lieut. Allan F. Gandy det. Nav. A. Sta., Annapolis, to the Aero.

Ensign Charles S. Green det. U.S.S. Eagle 68, to temp. duty Nav. A. Sta., Pensacola.

Ensign Frank E. Dunn det. U.S.S. William Jones, to temp. duty Nav. A. Sta., Pensacola.

Ensign William V. DeGuerren det. U.S.S. Kennedy, to temp. duty Nav. A. Sta., Pensacola.

Marine Corps Air Orders

Ser. H. L. T. Berke detached from duty N.A.S., Pensacola and assigned to duty M.D., N.A.S., Pensacola.

Ser. Louis T. B. White, C. J. Chappell, L. B. Rine, C. E. Marshall detached N.A.S., San Diego, to N.A.S., Pensacola.

Ser. Louis J. B. McElroy detached M.D., N.A.S., Pensacola, to N.A.S., Pensacola, for aviation instruction.

First Lieut. B. Skinner and V. H. Gwynne and Ser. Louis L. C. Hannon, J. E. Jones, P. A. Roubler, W. J. Stuart, L. B. Peckham, R. A. Thomas, P. A. Gennett detached M.D., Quantico, to N.A.S., Pensacola.

SALE OF 101 ITEMS OF AIRPLANE EQUIPMENT

Read Carefully

Item	Price	Item	Price
1. Altimeter, aneroid, sealed, maximum 30,000 ft., altimeter 2475		47. Kite, Wehrhite, with all wires and hardware for C-22, 2475	
2. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	48. "Baker" motor for high lift application	\$1.00
3. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	49. "Baker" motor for high lift application	\$1.00
4. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	50. "Baker" motor for high lift application	\$1.00
5. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	51. "Baker" motor for high lift application	\$1.00
6. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	52. "Baker" motor for high lift application	\$1.00
7. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	53. "Baker" motor for high lift application	\$1.00
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11. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	57. "Baker" motor for high lift application	\$1.00
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13. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	59. "Baker" motor for high lift application	\$1.00
14. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	60. "Baker" motor for high lift application	\$1.00
15. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	61. "Baker" motor for high lift application	\$1.00
16. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	62. "Baker" motor for high lift application	\$1.00
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18. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	64. "Baker" motor for high lift application	\$1.00
19. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	65. "Baker" motor for high lift application	\$1.00
20. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	66. "Baker" motor for high lift application	\$1.00
21. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	67. "Baker" motor for high lift application	\$1.00
22. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	68. "Baker" motor for high lift application	\$1.00
23. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	69. "Baker" motor for high lift application	\$1.00
24. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	70. "Baker" motor for high lift application	\$1.00
25. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	71. "Baker" motor for high lift application	\$1.00
26. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	72. "Baker" motor for high lift application	\$1.00
27. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	73. "Baker" motor for high lift application	\$1.00
28. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	74. "Baker" motor for high lift application	\$1.00
29. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	75. "Baker" motor for high lift application	\$1.00
30. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	76. "Baker" motor for high lift application	\$1.00
31. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	77. "Baker" motor for high lift application	\$1.00
32. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	78. "Baker" motor for high lift application	\$1.00
33. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	79. "Baker" motor for high lift application	\$1.00
34. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	80. "Baker" motor for high lift application	\$1.00
35. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	81. "Baker" motor for high lift application	\$1.00
36. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	82. "Baker" motor for high lift application	\$1.00
37. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	83. "Baker" motor for high lift application	\$1.00
38. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	84. "Baker" motor for high lift application	\$1.00
39. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	85. "Baker" motor for high lift application	\$1.00
40. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	86. "Baker" motor for high lift application	\$1.00
41. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	87. "Baker" motor for high lift application	\$1.00
42. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	88. "Baker" motor for high lift application	\$1.00
43. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	89. "Baker" motor for high lift application	\$1.00
44. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	90. "Baker" motor for high lift application	\$1.00
45. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	91. "Baker" motor for high lift application	\$1.00
46. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	92. "Baker" motor for high lift application	\$1.00
47. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	93. "Baker" motor for high lift application	\$1.00
48. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	94. "Baker" motor for high lift application	\$1.00
49. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	95. "Baker" motor for high lift application	\$1.00
50. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	96. "Baker" motor for high lift application	\$1.00
51. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	97. "Baker" motor for high lift application	\$1.00
52. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	98. "Baker" motor for high lift application	\$1.00
53. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	99. "Baker" motor for high lift application	\$1.00
54. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	100. "Baker" motor for high lift application	\$1.00
55. Airspeed indicator, sealed, maximum 100 mph, altimeter 2475	\$2.00	101. "Baker" motor for high lift application	\$1.00

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47. Kite, Wehrhite, with all wires and hardware for C-22, 2475		92. "Baker" motor for high lift application	\$1.00
48. "Baker" motor for high lift application	\$1.00	93. "Baker" motor for high lift application	\$1.00
49. "Baker" motor for high lift application	\$1.00	94. "Baker" motor for high lift application	\$1.00
50. "Baker" motor for high lift application	\$1.00	95. "Baker" motor for high lift application	\$1.00
51. "Baker" motor for high lift application	\$1.00	96. "Baker" motor for high lift application	\$1.00
52. "Baker" motor for high lift application	\$1.00	97. "Baker" motor for high lift application	\$1.00
53. "Baker" motor for high lift application	\$1.00	98. "Baker" motor for high lift application	\$1.00
54. "Baker" motor for high lift application	\$1.00	99. "Baker" motor for high lift application	\$1.00
55. "Baker" motor for high lift application	\$1.00	100. "Baker" motor for high lift application	\$1.00
56. "Baker" motor for high lift application	\$1.00	101. "Baker" motor for high lift application	\$1.00
57. "Baker" motor for high lift application	\$1.00		
58. "Baker" motor for high lift application	\$1.00		
59. "Baker" motor for high lift application	\$1.00		
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PUBLISHER'S NEWS LETTER

The intense interest concerning regulation of aviation increases daily if the mail received is any indication. No subject, not even the separate air force proposal, has covered by air up with such wide dissemination of opinion. Letters, of eight and ten typewritten pages, came with requests that they be printed in full. Of course, it is most helpful to the cause of aviation to have many more air pilots and operators printed their first extended views of only a few. For this reason we have had to omit many pages of extremely interesting observations. As any continued injustice of the same subject becomes necessary, we shall print a few more pages of these opinions and then stop.

* * *

While there is no certainty about any constructive legislation dealing with aerial passing Congress, the issue, it may be well to anticipate the passage of a regulatory bill and make a suggestion that may be helpful. Assuming that some bill is passed placing the control of aeronautical inspection and regulation in the Department of Commerce, the first step to be taken is of the greatest importance. In outlining the policy of the Department, in case this added responsibility was placed upon it, Assistant Secretary Drake, in a letter to AVIATION, stated that a conference of all those interested would be held before any decision was made. Should such a meeting take place, we feel that it is of the greatest importance to have all groups represented.

* * *

There are four distinct interests that should be represented at any such conference: the manufacturers of commercial aircraft, air transport companies, the aerial service operators and the commercial pilots. Suppose at such a meeting, representatives of each of these groups were considered, it would certainly go far toward setting any regulations more practical.

If such pilots as our own Cy Caldwell, the ever-present Casey Jones, the old reliable Eddie Stinson, and several others, like Howard at Philadelphia, should be heard for the commercial flier, it seems to us that everyone would feel that this group would be well represented.

There would also the aerial service operators and so one thinks of this class without being in

mind E. A. Johnson of Dayton, Tony Yankov of Chicago, Rury Campbell of Molina. With these old timers working out for the interests of the South line operators, their interests would be cared for. For the air transport group, of course, Col Paul Henderson of the National Air Transport would lend any such deliberation. If the Western lines were represented by Mr. Harris M. Hasbue and Walter T. Vasey of the new California air transport companies, these new operators would have excellent representation. For the manufacturers of commercial aircraft, a trio composed of Frank Russell who sells Cessner Planes and Lucks, E. J. Janin who makes the Waco, and W. D. Mayo of the Ford air transport would complete the conference.

* * *

With such men to advise him, Secretary Hoover would start right and could carry out the formulation of any regulations with every possible interest considered. Such a gathering would establish confidence in a way nothing else could. So we add, if there is to be regulation this year, start with a conference composed of the leaders of the four groups and do not let this vitally important matter fall into the hands of the so-called expert who is usually riding his hobby.

* * *

A very legitimate complaint has been received from one of our advertisers. He writes that he has recently received from two young boys requests for catalogues and specifications for his airplane. As the aircraft that he manufactures sell at around \$15,000 he feels that it is a waste of time for the writer as well as himself to have such requests come from persons who are not prospective purchasers. He says: "There is no question in my mind that you will find that it will be a detraction from advertising, especially by those who are doing business with the government. If these boys would know that manufacturers are not able to get out information in regard to government machines, I think many of them might be dissuaded from bothering the manufacturers." So here is the hope expressed that if any boys read AVIATION and we think there are not a great many, that they will, in writing, ask only for any catalogue of commercial aircraft—L. D. G.

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